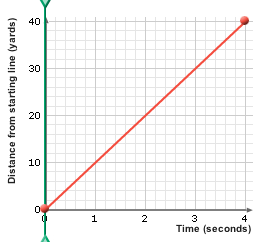
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

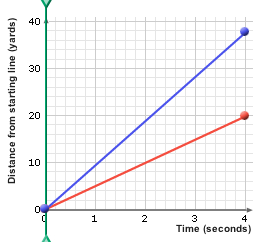
Displacement vs Time Graphs

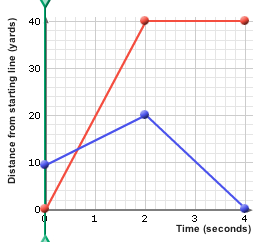
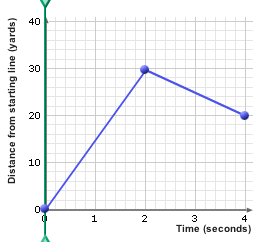
Draw all graphs on graph paper. Graphs must be fully label, of an appropriate size and scale, and use neat straight lines where possible

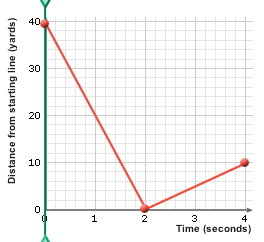
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1. Notice the graph on the right.   
   1. What are the two variables being measured?

* 1. Notice the shape of the graph (the red line). As time is increasing, what is happening to the distance?



1. The graph on the right represents two runners.   
   1. Which runner is moving faster (blue or red)? Explain.
2. Using the graph on the right answer the following questions about two runners.  
   1. What are the starting points of the red and blue runner?
   2. Between 0-2 seconds, predict which runner is moving faster.
   3. Describe what each runner is doing between 2-4 seconds.
3. On graph paper draw the displacement vs. time graphs which represent the following motions:  
   1. An object whose velocity is increasing
   2. An object moving at a constant non-zero velocity
   3. An object moving at a constant non-zero speed, then traveling at a faster constant velocity, stopping for a short time, then returning to its point of origin with a different constant velocity.
4. A scout moves north in the forest for a distance of 50.0 m in 90.0 seconds, stops for 30.0 seconds, then moves south 75.0 m in 75.0 seconds.  
   1. On graph paper draw the displacement vs. time graph for the scout’s trip.
   2. Calculate the scout’s average velocity for the trip.
5. Calculate the average velocity of the object in each of the graphs below.  
   1. 





* 1. 